

General Paralysis.

Only two suffered from general paralysis of the insane, a disease surprisingly rare in Broadmoor.

1. Reached only Standard I at school, and had always been mentally retarded.
2. Engine driver. Set fire to several outhouses, called people's attention to the fires and gleefully watched the firemen's effort to subdue the flames; probably an expression of the playful tendencies of the general paralytic.

Dementia Praecox.

In a condition noted for negativism and impulse one would expect it to loom more largely in the list, but only three suffered from this disease.

1. Commercial traveller. Had delusions of persecution, that he was followed by his enemies everywhere, and set fire to a haystack in order to get to prison, where the high walls would keep them away.
2. Clerk. Became apathetic and disinterested in his work. He watched a bungalow being constructed, and when the work was completed and the furniture installed, he broke in and set it on fire, causing its total destruction. He is alternately lethargic and restless, solitary and negativistic.
3. Gardener. Had periods of seclusiveness and inattention to work. Even during remissions is not anxious to discuss his case.

GENERAL NOTES AND OBSERVATIONS.

In these 100 cases one feature is outstanding, and that is the lack of education. Forty-four were mentally defective and could not be educated. Fifty lacked the power of application, and were so retarded that their educational attainments were limited. The remainder, supposed to be of brighter intellect, were more of the verbalist type, garrulous no doubt, and considered by some to be good conversationalists. On the surface they were apparently good, but none really had any depth of general education. The "clerk" can talk glibly of ships, but is poor at figures. The "commercial traveller" was an inferior writer of letters. The "lady of independent means" could talk of her wealth (not delusional), but on general topics was poor. One might correctly, then, assume that purposeless arson is only committed by persons who lack education. They have been untrained in the usual warnings of childhood, and if they have received warnings or chidings against fire they have soon forgotten or have not absorbed them.

In prison life one finds many reasons assigned for committing offences, and, true or otherwise, they are often excuses such as out of work and hungry, or a profession of amnesia. Except in the alcoholic and epileptic groups in this series, it is remarkable how often a definite reason, without excuse or attempt at mitigation, is given. Again, in prison, innocence, real or false, is often the plea, but, save the above exceptions, in this incendiarism it is notable how seldom there is denial of guilt. Occasionally there is an endeavour to show justification, but the reason is given freely, and the perpetration of the act admitted in most of the cases.

It would appear proverbial that "once a stack-firer, always a stack-firer," and all with repeated offences of arson showed remarkable consistency in their methods. With one exception, those who had been previously convicted set fire to haystacks and used the same methods of incendiarism. The one exception set fire to a barn his first time, and served a sentence of penal servitude. On release he not only committed a like offence, but actually set fire to the same barn. These are signs of the ineducable, the dull, and the backward—their minds running in one groove, with no foresight, ability to plan, initiative, or originality.

Of the 65 cases of stack-firing 36, or 55 per cent., of the culprits were definitely certifiable as mentally defective, while of the remainder all but half a dozen were of the backward type. This includes all those who never reached a high standard at school (Standard VI being credited as "high") owing to inability to learn or lack of application. All of them would certainly come under the classification of moron, the majority as feeble-minded. They are the more notable types of unemployed, or, more correctly, unemployable, who, owing to repeated refusals of work, or dismissal after brief trial, think the world "up against them," believe they are unwanted, and develop resentment and the sense of persecution, with which their inferior minds and morals cannot cope. Usually they progress, or

rather degenerate, into definite delusional insanity, culminating in some purposeless act, such as stack-firing. As to them the world has obviously shown its dislike, they therefore choose an obvious expression of their defiance by demonstrative incendiarism.

In Broadmoor, in this series of cases of patients found or certified insane, stack-firing is clearly the act of those definitely retarded, peculiarly the province of the mentally defective. They lack active cerebration, cannot conceive the terrible consequences which might ensue, the probable loss of life, serious damage, and the possibility of punishment. Rather in their childish ways do they look on themselves as heroic. In one case there was loss of life, in others heavy pecuniary loss, one case resulting in £36,000 damage. In these two outstanding cases the perpetrators were defectives who would nowadays be promptly certified under the Mental Deficiency Act. There are records of only two female stack-firers, both farm domestic servants. Probably the fact that until recently women were non-smokers, and did not, as a rule, carry matches, may have had something to do with that.

Of the 35 who set fire to buildings or their contents 11, or 31 per cent., were definitely certifiable as mentally defective; 18, or 52 per cent., were backward and showed psychoses; the remaining 6, or 17 per cent., were supposed to have had a fair degree of education. Whereas there were only 2 women among the stack-firers, in this group there are 7, or 20 per cent. of the total.

Whilst under asylum care the majority of the patients are, as a rule, well-behaved, but few seek to take advantage of any opportunities to learn, even when they possess limited ability. Those who, labouring under the stress of persecution, committed arson, have usually other wilfully demonstrative methods of showing dislike, such as tearing up sheets, etc., and require careful supervision. There is little room for improvement, and they generally degenerate into dementia.

I am indebted to the Home Office and to Dr. H. P. Foulerton, medical superintendent of Broadmoor, for permission to publish these notes, and, in conclusion, I would add that any observations expressed are not necessarily official opinions.

AN INSTITUTE OF RAY THERAPY.

A VOLUNTARY "LIGHT" CLINIC FOR LONDON.

An Institute of Ray Therapy has recently been opened in the borough of St. Pancras—in effect, a voluntary special hospital in which actinotherapy is the sole method of treatment—and both by reason of its scale and equipment and the manner in which its work is to be organized it merits the attention of the medical profession. The building, in the Camden Road, with its pleasant white exterior and lattice shutters, gives a distinctive touch to a rather drab thoroughfare. It is still, in large part, in the workmen's hands, but a considerable block is completed, and patients are already being treated. Ray therapy, it should be understood, means only what is popularly known as light treatment, and the subtitle of the institute is "Sunlight Clinic"; it has nothing to do with x rays or with massage or any form of hydrotherapy.

Some fifteen months ago a business man of Kentish Town, Mr. G. F. Kimber, called upon Dr. William Beaumont, the physician in charge of the municipal sunlight clinic, St. Pancras, and offered to give £10,000 towards the establishment of an institution for ray treatment for the poor, the institution not to be run for profit, but to be on the lines of a voluntary hospital, providing treatment free for the necessitous and otherwise for working people, at small fees adjusted to the patient's means. A trust was created, an organization brought into being, a site discovered, and the work put in hand, part of the original donation being expended in the purchase of land and buildings. Dr. Beaumont himself, the honorary medical director, disclaims any idea that it has been a "one man show," but there is little doubt that he and his wife, who is the honorary secretary, have been the moving spirits in a venture which it is hoped may eventually be the means of treating 20,000 cases a year, and do much to establish on proper lines the position of actinotherapy in this country.

The institute has been formed with three objects in view: first, to provide treatment for sick and poor persons by means

of ray therapy; secondly, to constitute a training centre for persons who will be qualified to administer such treatment; and, thirdly, to be a centre of research work in the subject. The administration is vested in a medical advisory committee and a committee of management. Sir William Hale-White is president of the advisory committee, Sir William Hamer, late medical officer of health for London, is chairman, and the other members are Professor J. Eyre of Guy's Hospital, Dr. P. P. Dalton and Dr. J. Liddell (who have been elected respectively by the St. Pancras and the City Divisions of the British Medical Association), and Dr. Beaumont. The committee of management has for its chairman Mr. Alfred Davies, a prominent business man in St. Pancras and the City, who is associated with various hospital movements, and the treasurer is Mr. Kimber, the original donor. There is a resident medical officer, who has a flat on the premises, and the nursing staff consists of a matron and sister in charge, with other nurses, all non-resident, to be added as requirements develop. The teaching staff is to consist of Professor Eyre, who will lecture on bacteriology, Dr. N. Lucas, experimental pathologist at the Lister Institute, whose subject will be the physics of ray therapy, and the honorary medical director, who will deal with the clinical side.

One governing principle is that no patient shall be admitted save on the recommendation of his private or insurance practitioner. Treatment will be given only upon the presentation of a medical certificate by the applicant. The adoption of this principle and the general lines proposed for the work of the institute have won the support of the British Medical Association, whose officials have been consulted from time to time by those responsible for the initiation of the work. It is hoped to work in close co-operation with the practitioners who send cases, and a card system has been devised which, in addition to serving the purposes of the institute, will afford information to the practitioner about his patient.

The question of patients' fees has been carefully thought out, and the general lines of the scale suggested by the British Medical Association in the last Annual Report of Council have been followed. Necessitous cases, as already stated, are to be treated free. Other patients are arranged in four grades, according to their earnings and the number of their dependants; the fees charged range, according to the grade, from one to five shillings for each treatment. The excellent rule is laid down that the practitioner sending the case, who is obviously the best person to judge, shall grade the patient. The institute expects to be of service under the National Health Insurance Act in so far as ray treatment may be made an additional benefit. The Hearts of Oak Benefit Society has already made arrangements for light therapy to be obtained at the institute by its members. In view of the fact that this will be a clinic for working people, the hours of treatment are being arranged so that patients can attend after the working day, and children after school-time.

A tour of the institute at the moment, when it has scarcely begun to operate, requires some exercise of faith, for the treatment is being carried on in what will be eventually the administration block. When the premises are fully available the arrangement of the equipment will permit numbers of patients to be treated simultaneously, and by any form of light treatment which has been proved effective for the purpose. The nucleus of equipment at present consists of a quadruple carbon arc, a mercury vapour lamp, a Kromayer lamp, a water-cooled tungsten, and an ordinary tungsten, but the plans provide for much more extensive installation, and for many separate cubicles and group treatment rooms. A great deal of thought has been taken in arranging the rooms for the reception of patients, for rest after treatment, and for shower baths. The institute is situated at 152-154, Camden Road, N.W.1, within seven minutes' walk of the important Camden Town underground junction; it is hoped that its income will be augmented by voluntary contributions.

The building will be ready with full equipment by the end of February, and an official opening will follow later.

It is announced that all financial liabilities connected with the removal and rebuilding of the Royal Westminster Ophthalmic Hospital in Broad Street, Holborn, have now been met, with the exception of a bank overdraft of £15,000. The new building was opened a year ago, and the total cost of the removal from Charing Cross was £140,000.

VITAL STATISTICS FOR ENGLAND AND WALES, 1929.

WE are indebted to the Registrar-General for the following statement regarding the birth rates and death rates and the rates of infantile mortality in England and Wales and in certain parts of the country during 1929. The statement is issued for the information of medical officers of health. The birth rate and infantile mortality rate for London have been provisionally corrected for transfers.

ENGLAND AND WALES.

Birth Rate, Death Rate, and Infantile Mortality during the Year 1929 (Provisional Figures).

	Live Births per 1,000 Population.	Deaths per 1,000 Population (Crude Rate).	Deaths under One Year per 1,000 Live Births.
England and Wales (on 1929 estimated population)	16.3	13.4	74
107 county boroughs and great towns, including London (on 1928 estimated population)	16.7	13.8	79
157 smaller towns (populations from 20,000 to 50,000 in 1921—on 1928 estimated population)	16.0	12.3	69
London (on 1928 estimated population)	15.9	13.9	70

The death rate for England and Wales relates to the whole population, but that for London and the two groups of towns to the civil population only.

England and Wales.

The birth rate is 0.4 per 1,000 below that of 1928, and is the lowest recorded. The death rate is 1.7 per 1,000 above that of 1928, a rise practically confined to the first quarter of the year, and due to the epidemic of influenza in the spring and the severe weather in that period.

The infantile mortality rate has increased from 65 to 74 per 1,000 live births, a rise probably due to the same causes.

Ireland.

Public Health in the Irish Free State.

THE third report of the Department of Local Government and Public Health (Irish Free State), which covers the twelve months ending March 31st, 1928, has now been issued; it contains sections relating to general administration and local finance, public health, housing, poor relief, and rates. The conclusion is drawn that the system of notification is still defective, more so in rural than in urban districts. In several areas county medical officers of health were appointed during the year under review to supply the department with weekly reports of infectious diseases, taking the place of the individual reports previously submitted by district medical officers. Exceptions are made as regards small-pox and typhus fever, where, to obviate possible loss of time, direct communication between the district medical officers and the department continues. The county medical officer is responsible for preventive measures in his area, including the school medical services and tuberculosis, the adequacy and purity of water supplies, cleanliness in food and dwellings, the supervision of midwives, maternity and child welfare, and the welfare of the blind. Such medical officers of health were already functioning in Cork, Carlow, Kildare, and Offaly when the report was compiled, and further appointments are being made in the remaining counties as opportunity offers. The Rockefeller Foundation has assisted in the organization of such county health units in Cork and Kildare. It is hoped to appoint trained whole-time sanitary inspectors in all these county areas before long, and school medical services are being inaugurated. The general death-rate in the year under review amounted to 14.77 per 1,000, an advance of 0.72 on 1926, due principally to an increased mortality from influenza, and, to a less extent, to affections of the respiratory system and heart disease. The infant mortality improved, however, and the death rate from the principal